

## AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A foam molding method for foaming a foamable material, comprising:

providing a mold having a cavity, ~~the cavity having a cavity volume;~~ the mold including a tube for allowing communication between the cavity of the mold and external air, and a discharge valve for opening and closing the tube;

preparing a foamable material by mechanically mixing a material to be foamed with a gas;

opening the discharge valve such that the cavity of the mold is placed under atmospheric pressure, and such that the cavity of the mold is at atmospheric pressure when injection of the foamable material into the cavity of the mold is started;

injecting the foamable material into the cavity of the mold;

controlling an injection flow rate of the foamable material injected into the cavity of the mold;

pressurizing the cavity of the mold to a pressurization;

foaming the foamable material in the cavity of the mold under the pressurization to control foaming of the foamable material; and

releasing the pressurization of the cavity of the ~~mold.~~ mold,

~~wherein the cavity of the mold is at atmospheric pressure when injection of the foamable material into the cavity of the mold is started.~~

2. (Previously Presented) A foam molding method according to claim 1, wherein said pressurizing includes hermetically closing the cavity of the mold.

3. (Previously Presented) A foam molding method according to claim 2, wherein said injecting the foamable material occurs after or simultaneously with said hermetically closing.

4. (Previously Presented) A foam molding method according to claim 2, wherein said pressurizing includes supplying a predetermined gas to the cavity after or simultaneously with said hermetically closing.

5. (Previously Presented) A foam molding method according to claim 2, wherein said pressurizing includes supplying a predetermined gas to the cavity after or simultaneously with said hermetically closing, and said injecting the foamable material.

6. (Previously Presented) A foam molding method according to claim 1, further comprising controlling said pressurizing such that the pressurization of the cavity is a predetermined level.

7. (Previously Presented) A foam molding method according to claim 6, wherein said controlling is commenced when the pressurization of the cavity reaches the predetermined level.

8. (Previously Presented) A foam molding method according to claim 6, wherein said controlling is commenced when the foamable material is first injected into the cavity.

9. (Previously Presented) A foam molding method according to claim 6, wherein said controlling includes discharging a gas from inside the cavity of the mold to outside the cavity of the mold.

10. (Previously Presented) A foam molding method according to claim 6, wherein during said controlling, a pressure in the cavity of the mold is controlled to 0.1 Kg/cm<sup>2</sup> or more.

11. (Previously Presented) A foam molding method according to claim 2, wherein said releasing includes opening the hermetically closed cavity of the mold.

12 - 23. (Canceled)

24. (Currently Amended) A foam molding method for foaming a foamable material, comprising:

providing a mold having a cavity, ~~the cavity having a cavity volume;~~ the mold including a tube for allowing communication between the cavity of the mold and external air, and a discharge valve for opening and closing the tube;

providing a core member in the cavity of the mold, the core member having a periphery;  
preparing a foamable material by mechanically mixing a material to be foamed with a gas;

opening the discharge valve such that the cavity of the mold is placed under atmospheric pressure, and such that the cavity of the mold is at atmospheric pressure when injection of the foamable material into the cavity of the mold is started;

injecting the foamable material into the cavity of the mold;  
controlling an injection flow rate of the foamable material injected into the cavity of the mold;  
pressurizing the cavity of the mold to a pressurization;  
foaming the foamable material in the cavity of the mold under the pressurization to control foaming of the foamable material, wherein the foamable material adheres to the core member and at least partially circumscribes the periphery of the core member; and  
releasing the pressurization of the cavity of the ~~mold~~, mold.  
~~wherein the cavity of the mold is at atmospheric pressure when injection of the foamable material into the cavity of the mold is started.~~

25. (Withdrawn - Currently Amended) A foam molding method for foaming a foamable material, comprising:

providing a mold having a cavity, ~~the cavity having a cavity volume;~~ the mold including a tube for allowing communication between the cavity of the mold and external air, and a discharge valve for opening and closing the tube;

providing a casing in the cavity of the mold, said casing having a hollow structure with opposing open ends;

preparing a foamable material by mechanically mixing a material to be foamed with a gas;

opening the discharge valve such that the cavity of the mold is placed under atmospheric pressure, and such that the cavity of the mold is at atmospheric pressure when injection of the foamable material into the cavity of the mold is started;

injecting a foamable material into the cavity of the mold;

controlling an injection flow rate of the foamable material injected into the cavity of the mold;

pressurizing the cavity of the mold to a pressurization;

foaming the foamable material so as to fill a hollow portion of the casing, to control foaming of the foamable material; and

releasing the pressurized condition of the cavity of the ~~mold~~, mold.

~~wherein the cavity of the mold is at atmospheric pressure when injection of the foamable material into the cavity of the mold is started.~~

26 - 35. (Canceled)

36. (Previously Presented) A foam molding method according to claim 1, wherein after an injected volume of the foamable material is injected into the mold, said foaming includes maintaining a pressure in the cavity of the mold or further pressurizing the cavity of the mold to a higher pressurization.

37. (Previously Presented) A foam molding method according to claim 36, wherein after an injected volume of the foamable material is injected into the mold, said foaming includes maintaining a pressure in the cavity of the mold by depressurizing the cavity of the mold.

38. (Previously Presented) A foam molding method according to claim 36, wherein after an injected volume of the foamable material is injected into the mold, said foaming includes releasing a gas from the mold based on an injected amount of the foamable material such that a pressure inside the cavity is maintained.

39. (Previously Presented) A foam molding method according to claim 1, wherein the injection flow rate of the foamable material is controlled by opening or closing a discharge valve based on a measurement of a flowmeter.

40. (Previously Presented) A foam molding method according to claim 1, wherein the injection flow rate of the foamable material is controlled by opening or closing a discharge valve based on a measurement of a flowmeter such that pressure in the cavity of the mold is controlled to a predetermined level.

41. (New) A foam molding method according to claim 1, wherein said step of preparing a foamable material includes mechanically mixing the material to be foamed with the gas before the foamable material is injected into the cavity of the mold.